



STATE MINING AND GEOLOGY BOARD

EXECUTIVE OFFICER'S REPORT

For Meeting Date: March 10, 2011

Agenda Item No. 2: Approval of Adjusted Financial Assurance Cost Estimate for Diamond Quarry (CA Mine ID #91-09-0003), Sierra Rock (Operator), Mr. Loring Brunius (Agent), County of El Dorado.

INTRODUCTION: The State Mining and Geology Board (SMGB) serves as the lead agency for the County of El Dorado pursuant to the Surface Mining and Reclamation Act of 1975 (SMARA, Public Resources Code (PRC) Section 2710, et seq.). SMARA requires that each surface mining operation maintain a financial assurance in an amount adequate to reclaim, in accordance with the requirements of an approved reclamation plan, the land disturbed by the mining operation at the conclusion of mining activities. SMARA lead agencies are required to annually review the financial assurance amounts for each surface mining operation, and adjust the amount, as necessary, to account for new land disturbed, inflation, or land reclaimed. In any event, the lead agency must ensure that the approved amount is adequate to reclaim the mine site according to the reclamation plan requirements (PRC Sections 2770 and 2773.1, and California Code of Regulations (CCR) Section 3804).

STATUTORY AND REGULATORY AUTHORITY: Financial assurance cost estimate adjustment requirements are discussed under SMARA, and within the SMGB's regulations and guidelines. Lead agencies are required to assure that financial assurances for reclamation are sufficient pursuant to Division 2, Chapter 9, Article 5 of PRC Section 2770(d) which states:

"The lead agency's review of reclamation plans submitted pursuant to subdivision (b) or of financial assurances pursuant to subdivision (c) is limited to whether the plan or the financial assurances substantially meet the applicable requirements of Sections 2772, 2773, and 2773.1, and the lead agency surface mining ordinance adopted pursuant to subdivision (a) of Section 2774, but, in any event, the lead agency shall require that financial assurances for reclamation be sufficient to perform reclamation of lands remaining disturbed. Reclamation plans or financial assurances determined to substantially meet these requirements shall be approved by the lead agency for purposes of this chapter. Reclamation plans or financial assurances determined not to substantially meet these requirements shall be returned to the operator within 60 days. Reclamation plans or financial assurances determined not to substantially meet these requirements shall be returned to the operator within 60 days. The



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operator has 60 days to revise the plan or financial assurances to address identified deficiencies, at which time the revised plan or financial assurances shall be returned to the lead agency for review and approval.”

In addition, PRC Section 2773.1(a) states:

“...Lead agencies shall require financial assurances of each surface mining operation to ensure reclamation is performed in accordance with the surface mining operation's approved reclamation plan, as follows:

(3) The amount of financial assurances required of a surface mining operation for any one year shall be adjusted annually to account for new lands disturbed by surface mining operations, inflation, and reclamation of lands accomplished in accordance with the approved reclamation plan.”

Furthermore, the SMGB's regulations pursuant to Article 11 of CCR Section 3804, Calculation of Financial Assurance Amount, states:

“(a) The Financial Assurance Amount shall be calculated as prescribed in Public Resources Code Section 2773.1 and based on:

- (1) an analysis of the physical activities and materials necessary to implement the approved reclamation plan;*
- (2) the lead agency's unit costs, or costs for third party contracting, for each of these activities, if applicable;*
- (3) the number of units of each of these activities, if applicable;*
- (4) a contingency amount not to exceed 10% of the reclamation costs.*

(b) The calculated amount should not include the cost of completing mining of the site.

(c) In order for the lead agency or the Department of Conservation to determine what annual adjustments, if any, are appropriate to the Financial Assurance Amount, the operator shall annually submit to the lead agency a revision of the written calculation required under Section 3804(a).”

BACKGROUND: Sierra Rock operates an active aggregate surface mining operation known as the Diamond Quarry where limestone is extracted to produce a variety of products including aggregate base material, Portland cement concrete aggregate, and several specialty products including building stone, lime (mortar), agricultural soil amendments, and decorative stone, among others.



Diamond Quarry is located approximately three miles southeast of Placerville, California, is accessed via Quarry Road, and encompasses about 54 acres. The overall topography of the property is characterized by a large open pit in the northeast portion of the site, flat pads separated by intervening cut slopes in the western portion of the site and a rounded hill, ponds, and material stockpiles in the southern and southeastern portions of the site.

Features on the Diamond Quarry site include material loading areas, a truck scale, administrative offices, maintenance and storage areas, processing plant, material and product stockpiles, equipment staging and boneyard area, an open-pit quarry and quarry pond, processed soil stockpiles and sediment settling ponds. The processing and material handling area, encompassing about seven acres, is situated immediately west of the quarry pit at an approximate elevation of 2,030 feet above mean sea level (msl). An equipment staging and boneyard area, encompassing about five acres, is situated on the upper bench along the western portion of the site. Process water settling ponds that serve as production areas for “flour” agricultural lime material, and stockpiled processed fines, are situated in the southeastern portion of the site. The quarry pit is accessed via a haul road from the north, and deepens toward the south where an interior pond exists. At time of inspection the water surface of the quarry pond was noted at an elevation of approximately 1,850 feet above msl.

Tightly folded metamorphosed marine sediments and intermediate volcanic rocks of Jurassic age underlie the site, with intercalated limestone and marble. Surrounding rock includes graphitic slate, quartzite, diabase intrusive rocks and metavolcanic rocks of the Calaveras Formation. Conventional quarrying techniques are employed with the use of rotary pneumatic drills. Selective material is blasted and hauled via truck ramps to the main processing area. Material extracted is then screened, crushed and/or blended, employing both wet and dry processing methods.

An inspection of the Diamond Quarry surfacing mining operation was performed on December 15, 2010. At such time about 44 acres were deemed disturbed. The existing financial assurance is in the amount of \$203,190.00. One violation was noted at time of inspection as it is apparent that monitoring and reporting requirements of the revegetation test plot program within the 2007 Reclamation Plan have not been completed. One corrective measure is noted with regards to possible Reclamation Plan boundary line encroachment in the northeastern quarry area. It is recommended that the northern Reclamation Plan boundary be clearly and accurately defined on the ground in order to determine the proximity of recent surface mining activities.

The financial assurance was adjusted to reflect current site conditions, and anticipated disturbance over the next calendar year. The current financial assurance is in the form of a Certificate of Deposit for the amount of \$203,190.00, which was approved by the SMGB on April 12, 2007. Based on observations made during the 2010 mine inspection, the adjusted financial assurance cost estimate in the amount of \$174,177.00 is considered adequate. The



subject revised financial assurance cost estimate reflects a reduction (\$-29,130.00) compared to the financial assurance currently on file with the SMGB for the Diamond Quarry. This reduction is realized due to completion of slope stability remediation activities on the Upper West, Upper South and Upper Southeast cut slopes, and also due to a significant reduction in costs associated with monitoring.

The adjusted financial assurance cost estimate is summarized as follows:

FINANCIAL ASSURANCE COST ESTIMATE ADJUSTMENT SUMMARY:

I.	Primary Reclamation Activities	\$ 34,456.00
II.	Revegetation	\$ 24,756.00
III.	Plant Structures and Equipment Removal	\$ 42,235.00
IV.	Miscellaneous Costs	\$ 4,739.00
V.	Monitoring	\$ 10,500.00
	Total Direct Costs	\$ 116,686.00
VI.	Supervision/Overhead/Contingencies	
a.	Supervision (5.5%)	\$ 6,418.00
b.	Profit/Overhead (11.3%)	\$ 13,185.00
c.	Contingencies (10%)	\$ 11,668.00
d.	Mobilization (3%)	\$ 3,501.00
	Total Indirect Costs	\$ 34,772.00
	Total Direct plus Indirect Costs	\$ 151,458.00
	Lead Agency administrative cost (15%)	\$ 22,719.00
	Total Estimated Cost for Reclamation	\$ 174,177.00



CONSIDERATION BEFORE THE SMGB: The SMGB may take the following actions:

1. Approve as adequate the adjusted financial assurance cost estimate, without additions;

[or]

2. Modify the adjusted financial assurance cost estimate, and then accept it as adequate;

[or]

3. Reject the adjusted financial assurance cost estimate as inadequate and order it to be redone.

EXECUTIVE OFFICER'S RECOMMENDATION: The adjusted financial assurance cost estimate for the Diamond Quarry has been reviewed for its consistency and completeness in meeting the minimum requirements of SMARA, and the SMGB's regulations and guidelines. SMGB and OMR staff have reviewed the adjusted financial assurance cost estimate, and consider it adequate to reclaim the site in accordance with the approved reclamation plan. The Executive Officer recommends that the SMGB approve the adjusted financial assurance cost estimate.

SUGGESTED MOTION LANGUAGE:

To approve the Adjusted Financial Assurance Cost Estimate:

Mr. Chairman, in light of the information before the State Mining and Geology Board today, I move that the SMGB approve the adjusted financial assurance cost estimate of \$174,177.00 for the Diamond Quarry surface mining operation, CA Mine ID #91-09-0003, located in the County of El Dorado, as adequate to reclaim the site in accordance with the approved reclamation plan, and as adequate in meeting the minimum requirements of SMARA and the SMGB's regulations.

Respectfully submitted:

Stephen M. Testa
Executive Officer

EXHIBITS

Exhibit A Adjusted Financial Assurance Cost Estimate

Exhibit B 2010 SMARA Annual Inspection Report

